



# Canine Accelerant Detection Association

## *Standards for Accelerant Detection Canine Team*

### **I. GENERAL**

- A. This standard has been reviewed and approved by the Canine Accelerant Detection Association's Board of Directors on June 3<sup>rd</sup> 2014.
- B. It shall be the purpose of this document to create "***best practice standards***" that will produce an exceptional canine accelerant detection team (*CADT*).
- C. This standard applies to canine accelerant detection teams (*CADT's*) that are certified by CADA.
- D. *CADT's* may be employed by any fire department, law enforcement or private-sector agency.
- E. The canine may be either food, play or treat reward.

### **II. DEFINITIONS**

- A. Accelerant Detection Canine: A canine trained to detect the presence of an ignitable liquid's.
- B. Alert: The multi-behavioral change in the canine when he/she detects an odor that he/she has been trained to detect.
- C. Blank: Used to describe an area, container or material that is free from containing an ignitable liquid.
- D. Certification: A process that attests to the successful completion of relevant skills for a canine accelerant detection team.

- E. Certified Accelerant Detection Canine Team: One handler and one canine that together have met the established criteria of this standard to become certified.
- F. Certifying Official: Individual/s having the responsibility of evaluating and certifying canine accelerant detection teams (CADT) for this association under the evaluation standards set forth by the organization.
- G. Distracters: Items or materials such as *clothing, tools, food, plastics, wood, etc.* placed in an area to “*distract*” the canine from locating the target odor. These items may be burned, and will not contain any ignitable liquids.
- H. Double-Blind Test: A test procedure in which neither the canine handler, nor the test administrator(s) know(s) where the target odors are located.
- I. False Alert: When a canine responds or gives an indication when there is no target odors present, aka “false positive” or a “false indication.”
- J. Final Response: A trained behavior that pinpoints a location from where a sample should be secured (*sit, scratch, bite, stare, point, etc.*).
- K. 50% Evaporated Gasoline: Automotive gasoline that has been evaporated to one-half of its original volume. Also known as “*weathered gasoline.*”
- L. Hot: Used to describe an area, container or material that contains an ignitable liquid.
- M. Missed Target: A situation in which a canine team fails to locate a target odor, aka “false negative” or “non-alert.”
- N. Mixed-Matrix: A mixture of materials that are placed in a container together, and is often burned.
- O. Scent Discrimination: The ability of the canine to differentiate an ignitable liquid odor from odors of materials that do not contain any ignitable liquid residues.
- P. Single-Blind Test: A testing procedure in which the CADT has no prior knowledge as to where the target odor is located. Only the test administrator(s) knows where the target odor/s is located aka a blind and/or unknown test.
- Q. Source: The point of origin of a target odor.
- R. Target/Target Odor: An ignitable liquid odor that the canine has been trained to detect.

### III. Certification

- A. The canine accelerant detection team shall be initially certified and then re-certified annually.
- B. In order to become certified, the canine team shall complete and pass all phases of the testing process. See **Attachment #1, Testing Standard for Certification**.
- C. A canine accelerant detection team (CADT) shall consist of one handler and one canine. If the handler has more than one canine or the canine has more than one handler, a new team exists and thus, each team will need to complete and pass all phases of the testing process.
- D. Certifications are valid for the individual CADT only and are non-transferable should any changes in the team occur.

### IV. Maintenance Training

- A. The following are “**best practice standards**” for canine accelerant detection teams. CADT’s are encouraged to follow these standards and also incorporate scenario based training into their maintenance training program.
- B. In addition to ignitable liquid odor recognition, the canine should be able to discriminate between ignitable liquid odors and odors that are generated by other materials burning at the fire scene. Many products today are manufactured using hydrocarbon materials. Proper training methods will minimize the canine from false alerting on materials other than ignitable liquids.
- C. CADT maintenance training shall occur on a regular basis in order to maintain the proficiency of the canine team. CADA recognizes that due to the different types of reward systems, some canines (*food reward*) may need to train more frequently in order for the canine to obtain the amount of food necessary for good health.
- D. Maintenance training shall be conducted in a manner to avoid routine.
  - 1. Maintenance training should occur at different times of day.
  - 2. Maintenance training shall consist of different training aides and scenarios (*cans, vehicles, blank rooms, stairs, outside searches, etc.*).
  - 3. Maintenance training shall include exposing the CADT to various heights and depths where the target odors could be located.

4. The canine should be trained to detect any of the following ignitable liquids:

<u>Light</u>	<u>Medium</u>	<u>Heavy</u>
1) Paint Remover	1) Ultra-Pure Lamp Oil	1) Diesel
2) Coleman Fuel	2) Gasoline	2) Kerosene
3) Acetone	3) 50% Evaporated Gasoline	
4) Lacquer Thinner	4) 75% Evaporated Gasoline	
	5) Charcoal Lighter Fluid	
	6) Paint Thinner	

5. The CADT should be trained on various quantities of ignitable liquids (*small vs. large amounts*). Consultation with the handler's laboratory chemist is highly recommended to determine the proper quantities to train on.
6. Scent discrimination training shall occur on a regular basis to expose the CADT to the various odors that may be encountered at a fire scene. These materials shall be burned inside clean metal cans with an ignitable liquid placed in one or more of the cans. The CADT will search the cans and shall be rewarded for giving a final response on the proper can(s) containing the target odor(s). The types of materials to be burned include, but shall not be limited to: *wood, newspaper, cardboard, plastics, rubber, linoleum, Styrofoam, carpet, carpet padding, cloth, nylon, and a mixed-matrix of materials.*
7. Should the canine false alert, the handler shall discourage the behavior and provide remedial training to help the canine understand that the behavior is unacceptable.
8. The CADT shall also be exposed to blank searches to help him/her learn that not every time that a search is conducted will it find a target odor.
9. The CADT shall also search for a different number of targets during each training session (*e.g. 1 target, 4 targets, or 10 targets*).

## **V. Training Aids (Ignitable Liquids)**

- A. Handling, storing, transporting and disposing of ignitable liquids shall be in accordance with local, state and federal regulations and/or guidelines.
- B. Ignitable liquids shall be packaged and labeled in a manner that is safe for both the handler and the canine.
- C. Ignitable liquids shall be stored in separate containers and in a manner to prevent odor contamination or physical contamination.

## **VI. Fire Scene Work**

The canine handler shall refer to the latest addition of NFPA 921, *Guide for Fire and Explosion Investigations*, and be guided by the recommended practices and procedures applicable to Canine/Handlers Teams.

## **VII. Canine Health & Safety**

- A. Health & safety of the canine must be a priority. The canine shall have a minimum of one complete physical examination a year.
- B. The handler should know basic canine first-aid and be able to render immediate care should the canine become injured. Care shall be provided to the canine until he/she can be examined and treated by an appropriate emergency animal care facility.
- C. It is the responsibility of the canine handler to insure that the fire scene is safe prior to deployment of the canine. The handler should complete a walk-through of a building or area that is to be searched to check for sharp objects, structural stability, fall hazards, or anything else that could injure the canine team. Due to safety concerns associated with fire scenes, it is the handler's decision whether to search all of a building or site, even areas not involved in the fire.
- D. Due to the dangerous chemicals that the canine may come into contact with at a fire scene, and to avoid any contamination issues, the canine should be bathed after every deployment. In addition, the compartment in the vehicle where the canine is transported should be cleaned after returning from each deployment.

## **VIII. Record Keeping**

- A. The canine handler shall document all training exercises, and all CADT deployment/work searches.
- B. All CADT records shall be retained for a length of time as required by the agency in which the handler is employed. It is recommended that at a minimum, records should be retained for (5) years after the canine retires from work.
- C. The information to be recorded shall be established by the agency that employs the handler. CADA provides record-keeping forms for agencies that do not have specific criteria.

D. Training records should include, but not limited to:

1. Name of handler and canine.
2. Date/time the training took place.
3. Training location.
4. Number of hides (targets).
5. Type of ignitable liquid trained on.
6. Quantity of ignitable liquid trained on.
7. Type of training (*scent discrimination, outside search, blank room, etc.*)
8. Size of search area.
9. Search results.
10. Deficiencies and corrective measures implemented.

E. Fire Search records should include, but not limited to:

1. Name of handler and canine.
2. Date of fire.
3. Date/time the canine team worked.
4. Location/address of search.
5. Type of search (*residence, vehicle, etc.*)
6. Size of area searched.
7. Search results.
8. Any other pertinent information to document the team's work.

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**Attachments:**

#1 Testing Standard for Certification

#2 Test Administrator(s)

#3 Record of Testing